

## **REMARKS**

### **I. Introduction**

Claims 1 to 5 are pending, of which claims 1 to 3 have been withdrawn from consideration. In view of following remarks, it is respectfully submitted that claims 4 and 5 are allowable, and reconsideration is respectfully requested.

Applicants respectfully request that the Examiner acknowledge the claim to priority and acknowledge receipt of the certified copy of the priority document in the next Office communication.

### **II. Rejection of Claims 4 and 5 Under 35 U.S.C. § 102(e)**

Claims 4 and 5 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,320,154 ("Akahori et al."). It is respectfully submitted that Akahori et al. do not anticipate the present claims for at least the following reasons.

To reject a claim as anticipated under 35 U.S.C. § 102, the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (*See Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). As explained herein, it is respectfully submitted that the Office Action does not meet this standard, for example, as to all of the features of the claims.

Claim 4 relates to a method for anisotropic plasma etching of a substrate, the method comprising: generating, with a plasma source that is configured to generate a high-frequency electromagnetic alternating field, a plasma having reactive species inside a chamber in a reaction region by the action of the alternating field upon an etching gas inserted into the reaction region and a passivating gas inserted into the reaction region; in the reaction region, inserting the etching gas predominantly into a first zone and inserting the passivating gas predominantly into a second zone; generating a reactive etching gas species in the first zone by using a plasma that is generated there, and generating reactive passivating gas species in the second zone by using a plasma that is generated there; and mixing the etching gas species and the passivating gas species with each other in a mixing region downstream from the reaction region before their action upon the substrate, wherein a quantity of the passivating gas that is used is minimized compared to a quantity of the etching gas.

Consequently, claim 4 states that etching gas is predominantly present in the first zone of the reaction region and passivating gas is predominantly present in the second

zone of the reaction region, that plasma is generated in the reaction region and produces reactive etching gas species and reactive passivating gas species in the reaction region, and that the reactive etching gas and passivating gas species are *mixed in a mixing region downstream from the reaction region* before acting upon the substrate.

In contrast, Akahori et al. provide for etching gas species to be generated in plasma chamber 21, and for passivating gas species to be generated in film-formation chamber 22, in which wafer 10 is mounted (see column 5, lines 24 through 63, and Fig. 1). Thus, even if a combination of plasma chamber 21 and film-formation chamber 22 were to be considered to constitute the reaction region of the present application, which is not conceded, the design of the plasma processing apparatus 1 of Akahori et al. necessitates that the etching gas species and passivating gas species of Akahori et al. be mixed in film-formation chamber 22 (*i.e.*, in the region in which the reactive passivating gas species is formed) and *not downstream from this reaction region, as required by the feature recited in claim 4.*

Moreover, the method according to Akahori et al. requires that the etching and passivating gas species be mixed in film-formation chamber 22. Therefore, it is respectfully submitted that Akahori et al. do not anticipate claim 4 for at least the foregoing reasons.

Claim 5 recites features essentially analogous to claim 4 with respect to the etching and passivating gases being mixed with each other in a mixing region downstream from the reaction region. Therefore, it is respectfully submitted that Akahori et al. do not anticipate claim 5 for at least the same reasons more fully set forth above in support of the patentability of claim 4.

In view of all the foregoing, withdrawal of this rejection is respectfully requested.

V. Conclusion

In view of the foregoing, it is respectfully submitted that all of the presently pending claims are allowable. It is therefore respectfully requested that the rejection be withdrawn, since it has been obviated. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is respectfully requested.

Respectfully submitted,

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